

## **Attachment B**

### **Generic Quality Assurance Project Plan Checklist**

The checklist that follows is an example of an approach that can be used to evaluate quality assurance project plans developed by EPA or external organizations. It outlines 24 elements of a quality assurance project plan and asks questions about how the plan addresses various aspects of each element.

Under the graded approach to quality management described throughout this document, this checklist may be used as is, noting that aspects and elements that do not apply to a given environmental data collection project, or the checklist may be modified for project-specific needs. As noted in Chapter 5, other forms of documentation may be employed, provided that the information needed to meet the requirements of the Office of Water quality system is included.

# Generic Quality Assurance Project Plan Checklist

July 2001

**Project Title:**

**Reviewer:**

**EPA Project Manager:**

**Date Submitted:**

**Plan Author/Organization:**

**Date Reviewed:**

**Conclusion/Recommendation:**

Acceptable \_\_\_\_\_ Acceptable with minor revisions \_\_\_\_\_ Not acceptable \_\_\_\_\_

**For plans found to be not acceptable, major deficiencies (defined here as the absence of relevant information) were found in the following elements:**

___ Title & Approval Sheet	___ Analytical Methods
___ Table of Contents	___ Quality Control
___ Distribution List	___ Instrument/Equipment Testing
___ Project/Task Organization	___ Instrument Calibration & Frequency
___ Problem Definition/Background	___ Inspection/Acceptance for Supplies
___ Project/Task Description	___ Data Acquisition (Non-Direct)
___ Quality Objectives & Criteria	___ Data Management
___ Special Training/Certification	___ Assessments & Response Actions
___ Documentation & Records	___ Reports to Management
___ Sampling Process Design	___ Data Review, Validation, & Verification
___ Sampling Method	___ Validation and Verification Methods
___ Sample Handling & Custody	___ Reconciliation with User Requirements

See the attached sheets for comments related to all elements.

<b>A = Acceptable      NI = Not Included</b>	<b>A</b>	<b>U</b>	<b>NI</b>	<b>NA</b>	
<b>U = Unacceptable      NA = Not Applicable</b>	<b>A</b>	<b>U</b>	<b>NI</b>	<b>NA</b>	<b>Comments</b>
<b>A1. Title &amp; Approval Sheet</b>					
Title					
Organization's name					
Dated signature of project manager					
Dated signature of QA officer					
Other signatures, as needed					
<b>A2. Table of Contents</b>					
<b>A3. Distribution List</b>					
<b>A4. Project/Task Organization</b>					
Identifies key individuals with their responsibilities (e.g., data users, decision makers, project QA manager, Subcontractors)					
Organization chart shows lines of authority & reporting responsibilities					
<b>A5. Problem Definition/Background</b>					
Clearly states problem or decision to be resolved					
Historical & background information					
<b>A6. Project/Task Description</b>					
Lists measurements to be made					
Cites applicable technical, regulatory, or program-specific quality standards, criteria, or objectives					
Notes special personnel or equipment requirements					
Provides work schedule					
Notes required project & QA records/reports					
<b>A7. Quality Objectives &amp; Criteria for Measurement Data</b>					
States project objectives and limits, both qualitatively & quantitatively					
States & characterizes measurement quality objectives as to applicable action levels or criteria					
<b>A8. Special Training Requirements/Certifications</b>					
<b>A9. Documentation &amp; Records</b>					
Lists information & records to be included in data report (e.g. raw data, field logs, results of QC checks, problems encountered)					
States requested lab turnaround time					
Gives retention time and location for records and reports					

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<b>B1. Sampling Process Design (Experimental Design)</b>					
Types and number of samples required					
Sampling network design & rationale for design					
Sampling locations & frequency of sampling					
Sample matrices					
Classification of each measurement parameter as either critical or needed for information only					
Validation study information, for non-standard situations					
<b>B2. Sampling Method Requirements</b>					
Identifies sample collection procedures & methods					
Lists equipment needs					
Identifies support facilities					
Identifies individuals responsible for corrective action					
<b>B3. Sample Handling &amp; Custody Requirements</b>					
Notes sample handling requirements					
Notes chain of custody procedures, if required					
<b>B4. Analytical Methods Requirements</b>					
Identifies analytical methods to be followed (with all options) & required equipment					
Provides validation information for non-standard methods					
Identifies individuals responsible for corrective action					
<b>B5. Quality Control Requirements</b>					
Identifies QC procedures & frequency for each sampling, analysis, or measurement technique, as well as associated acceptance criteria and corrective action					
References procedures used to calculate QC statistics ( e.g., precision, bias, accuracy)					
<b>B6. Instrument/Equipment Testing, Inspection, and Maintenance Requirements</b>					
Identifies acceptance testing of sampling and measurement systems					
Describes equipment needing calibration and frequency for such calibration					
Notes availability & location of spare parts					

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<b>B7. Instrument Calibration &amp; Frequency</b>					
Identifies equipment needing calibration and frequency for such calibration					
Notes required calibration standards and/or equipment					
Cites calibration records & manner traceable to equipment					
<b>B8. Inspection/Acceptance Requirements for Supplies &amp; Consumables</b>					
States acceptance criteria for supplies & consumables					
Notes responsible individuals					
<b>B9. Data Acquisition Requirements for Non-Direct Measurements</b>					
Identifies type of data needed from non-measurement sources (e.g., computer data bases and literature files), along with acceptance criteria for their use					
Describes any limitations of such data					
<b>B10. Data Management</b>					
Describes standard record keeping & data storage and retrieval requirements					
Checklist or standard forms attached to QAPP					
Describes data handling equipment & procedures used to process, compile and analyze data ( e.g., required computer hardware & software)					

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<b>C1. Assessments &amp; Response Actions</b>					
Lists required number, frequency, & type of assessments, with approximate date & names of responsible personnel					
Identifies individuals responsible for corrective actions					
<b>C2. Reports to Management</b>					
Identifies the preparer and recipients of reports					
Identifies frequency and distribution of reports for:					
Project status					
Results of performance evaluations & audits					
Results of periodic data quality assessments					

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Any significant QA problems					
<b>D1. Data Review, Validation, &amp; Verification</b>					
States criteria for accepting, rejecting, or qualifying data					
Includes project-specific calculations or algorithms					
<b>D2. Validation and Verification Methods</b>					
Describes process for data validation and verification					
Identifies issue resolution procedure and responsible individuals					
Identifies method for conveying these results to data users					
<b>D3. Reconciliation with User Requirements</b>					
Describes process for reconciling with DQOs and reporting limitations on use of data					